

## **Improved Furniture Conjoinment Structure**

### **BACKGROUND OF THE INVENTION**

#### **1) FIELD OF THE INVENTION**

The invention herein relates to an improved furniture conjoinment structure  
5 that is simple to assemble and low in cost.

#### **2) DESCRIPTION OF THE PRIOR ART**

Conventional furniture assembly structures typically utilize the following three generations of design for firmly assembling the table leg fixture to the tabletop:

10 (1) A detailed observation of the first-generation furniture assembly structure, as indicated in FIG. 1, reveals that the steel tubes A1 on the table leg fixture A have positioning holes A2, with a plastic bumper A3 (as shown in FIG. 1-A) fitted into each positioning hole A2 to fix a glass tabletop A4 in place and, furthermore, prevent the sliding of the glass tabletop A4.

15 (2) Observing the second-generation furniture assembly structure, as indicated in FIG. 2, the steel tubes A1 on the table leg fixture A have round washers B (as shown in FIG. 2-A) sleeved onto them such that when screws B1 fasten the steel tubes A1 to the tabletop steel tubing B2, this fixes the glass tabletop

A4 in place and, furthermore, prevent the sliding of the glass tabletop A4.

(3) Observing the third-generation furniture assembly structure, as indicated in FIG. 3, the steel tubes A1 on the table leg fixture A have positioning holes C, with a suction disc C1 (as shown in FIG. 3-A) fitted into each positioning hole C to  
5 fix a glass tabletop A4 in place and, furthermore, prevent the sliding of the glass tabletop A4.

While the said three generations of furniture conjoinment structures are by design all capable of firmly positioning the glass tabletop and preventing glass table top slippage, the said three generations of furniture conjoinment structures  
10 still have shortcomings. The first-generation assembly structure requires the drilling of positioning holes and, furthermore, the fitting of the plastic bumpers, the latter of which has the drawback of increasing component costs. The second-generation assembly structure requires the use of steel tubes sleeved with washers and, furthermore, screws for fastening, which again are drawbacks that raise  
15 component costs. The third-generation assembly structure requires the drilling of positioning holes and, furthermore, the fitting of the suction discs, yet again involving the drawback of greater component cost.

As a result, the applicant of the invention herein, having been engaged in the furniture manufacturing industry for many years and knowledgeable of the  
20 various shortcomings stemming from the conventional furniture assembly

structures, improved the shortcomings of the prior art by successfully developing the improved furniture conjunction structure of the present invention.

## **SUMMARY OF THE INVENTION**

The objective of the invention herein is to provide an improved furniture  
5 conjunction structure that is simple to assemble and, furthermore, low in cost.

The improved furniture conjunction structure of the present invention features an annular groove that is centrally disposed in the each of the top ends of the table leg fixture connector blocks for the placement of washers, thereby achieving a furniture conjunction structure that is of simpler assembly and lower  
10 cost.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is an exploded drawing of the prior art.

Figure 1-A is a magnified partial drawing of FIG. 1.

Figure 2 is an exploded drawing of the prior art.

15 Figure 2-A is a magnified partial drawing of FIG. 2.

Figure 3 is an exploded drawing of the prior art.

Figure 3-A is a magnified partial drawing of FIG. 3.

Figure 4 is an exploded drawing of the invention herein.

Figure 4-A is a magnified partial drawing of FIG. 4.

Figure 5 is an isometric drawing of the invention herein.

Figure 6 is a cross-sectional drawing of the invention herein.

## **DETAILED DESCRIPTION OF THE INVENTION**

5           Refer to FIG. 4 and FIG. 5, the exploded and the isometric drawing of the invention herein.

          The improved furniture conjoinment structure consists of a table leg fixture 1 assembled to a tabletop 2, the said table leg fixture 1 utilizing connector blocks 3 and tabletop support members 4 integrated into a quadrangle framework and, 10 furthermore, table legs 5 are attached to the bottom section of the connector blocks 3, the main features of which are: an annular groove 6 is centrally disposed in the top end of each connector block 3 for the placement of a washer 7 (as shown in FIG. 4-A), the said annular groove 6 and washer 7 are directly proportional in shape and, furthermore, the height of the washer 7 is greater than the depth of the 15 annular groove 6; additionally, the washer 7 is constructed of a pliant rubber/plastic material, enabling the stable placement of the tabletop 2 on the table leg fixture 1 and, furthermore, achieving a furniture conjoinment structure that is of simpler assembly and lower component cost.

          Refer to FIG. 6, the cross-sectional drawing of the invention herein.

When the table leg fixture 1 and the tabletop 2 are assembled together, due to the design of the table leg fixture 1 and the top ends of the connector blocks 3, the annular groove 6 centrally disposed in the connector block 3 top end provides for the entry of a washer 6 that not only simplifies assembly, but also reduces cost and, furthermore, stably maintains the position of tabletop 2 and effectively prevents slippage during usage.

In summation of the foregoing section, since the design of the invention herein provides a furniture assembly structure of straightforward arrangement and low cost, the present invention meets the new patent requirement of progressiveness and is submitted in application for the commensurate patent rights.